Environmental Protection

Emily Lloyd
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Thursday, February 19, 2015

Ms. Diane L. Huffman, Branch Chief
Water Enforcement Branch
WWPD/WENF
United States Environmental Protection
Agency, Region 7
11201 Renner Boulevard
Lenexa, KS 66219

Re: 2014 Annual Monitoring, Record Keeping and Reporting Requirements of the Federal Standards for the Use or Disposal of Sewage Sludge, 40 CFR Part 503

Dear Ms. Huffman:

Pursuant to Title 40 Code of Federal Regulations, Part 503 Federal Standards for the Use or Disposal of Sewage Sludge (40 CFR Part 503), the New York City Department of Environmental Protection (DEP) is submitting herewith, one annual report for each of the fourteen (14) Publicly Owned Treatment Works (POTWs) operated under the direction of DEP.

As a generator of sewage sludge, DEP has provided the following requisite information for the reporting period of January 1, 2014 through December 31, 2014:

a. Amount of sewage sludge generated in metric tons, expressed as a dry weight;

b. Use or disposal practices employed;

c. Amount of sewage sludge that went to each use or disposal practice;

d. Name and address of the preparer or land applier who received the sewage sludge;

e. Name and address of the land applier and owner/operator of the disposal site;

f. Analytical results of the pollutant concentrations in the sewage sludge, reported as milligrams per kilogram (expressed as a dry weight). Also included are the prescribed analytical methods, frequency of sewage sludge sampling/monitoring and the types of samples collected;

g. A listing of all relevant environmental (Federal, State or Local) permits and/or construction approvals received and/or applied for.

If you have any questions, comments or require additional information, please contact Mr. Allen Deur, P.E., Chief, Division of Operations Support, Bureau of Wastewater Treatment, at (718) 595-4295 or adeur@dep.nyc.gov.

Sincerely,

John Petito, P.E.
Acting Deputy Commissioner

Attachment

c: Diane Hammerman, Director, Regulatory Compliance & Administration, BWT
Allen Deur, Chief, Division of Operations Support, BWT
Theresa Tam, Chief, SPDES Compliance Section, BWT

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

February 2015

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

INTRODUCTION

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
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February 2015

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IX. CONTRACTORS' ISSUES

I. BACKGROUND AND OVERVIEW

The New York City Department of Environmental Protection (DEP) owns and operates fourteen Wastewater Treatment Plants (WWTPs) and eight sludge dewatering facilities located throughout the five boroughs of New York City (NYC). For this reporting period, the Jamaica and Tallman Island Dewatering Facilities were shut down. The dewatering facilities are equipped with centrifuges that remove a portion of the water from the liquid sludge to reduce its volume, thereby facilitating a more efficient and cost effective land-based Sludge/Biosolids Management Program. Dewatered sludge, or biosolids, is a nutrient rich, semi-solid material that is generated during the wastewater treatment process and can be beneficially applied to the land as a soil conditioner and fertilizing agent.

DEP contracts out the removal of its biosolids. All land application contractors have applied additional treatment to NYC biosolids regardless if it met the requirements of Process to Significantly Remove Pathogens (PSRP). During calendar year 2014 (CY2014) all biosolids were provided to the following contractors:

Contractor	Contract No.	End use
Environmental Protection & Improvement Company (EPIC)	1247-BIO	Landfill
Action Carting	1280-BIO	Landfill
Action Carting 2	1333-BIO	Landfill / Beneficial Use
Environmental Protection & Improvement Company (EPIC)	1269-BIO	Landfill / Beneficial Use
We Care Organics	1236-BIO	Mine Reclamation
We Care Organics	1308-BIO	Landfill/Beneficial Use

Details on the biosolids end use by the six contractors used during CY2014 are:

1. Environmental Protection & Improvement Company (EPIC) under Contract 1247-BIO

Environmental Protection & Improvement Company (EPIC) performed transportation and disposal services for biosolids generated at the NYC Dewatering Facilities. The contractor disposed of the biosolids at landfills including: Tunnel Hill Partner in New Lexington, Ohio, Waste Industries in Mauk, Georgia, Envirosolutions (ESI) in Coalton, Kentucky, and GROWS in North/Tullytown Landfill in Morrisville, Pennsylvania.

This contract ended in June 2014

2. Action Carting under Contract 1280-BIO

Action Carting performed transportation and disposal services for biosolids generated at the NYC Dewatering Facilities. The contractor disposed of the biosolids in the following landfills: Envirosolutions (ESI) in Coalton, Kentucky, GROWS in North/Tullytown Landfill in Morrisville, Pennsylvania, Greentree (PA) and Grand Central, Pen Argyl (PA).

3. Action Carting under Contract 1333-BIO

Action Carting performed transportation and disposal services for biosolids generated at the NYC Dewatering Facilities. This is a landfill/beneficial use contract. The contractor disposed of the biosolids in the following landfills: Envirosolutions (ESI) in Coalton, Kentucky, GROWS in North/Tullytown Landfill in Morrisville, Pennsylvania, Greentree (PA) and Grand Central, Pen Argyl (PA).

4. Environmental Protection & Improvement Company (EPIC) under Contract 1369-BIO

Environmental Protection & Improvement Company (EPIC) performed transportation and disposal services for biosolids generated at the NYC Dewatering Facilities. The contractor disposed of the biosolids at landfills including: Tunnel Hill Partner in New Lexington, Ohio, Waste Industries in Mauk, Georgia, and GROWS in North/Tullytown Landfill in Morrisville, Pennsylvania.

5. WeCare Organics under Contract 1236-BIO

WeCare Organics, LLC (WeCare) transported and processed the NYC biosolids via Alkaline Stabilization process at the Blackwood (Blackwood) Farms facility in Tremont, Pennsylvania and other sites.

Blackwood is a facility which has a fully permitted site by the Pennsylvania Department of Environmental Protection (PADEP) to process Class A biosolids via the Kyler Environmental Services, LLC. Kyler is wholly owned by WeCare and the permit is still under the Kyler name.

Lime and alkaline admixtures were added to the biosolids to achieve pH, temperature, and final total solids requirements. The addition of coal fly ash or wood ash helps adjust the final total solids concentration, helps control odors, and improves final product characteristics such as color and texture. Due to the lime addition, the resultant product is used primarily for mine reclamation. A moveable soil shredder is used to further process the material to produce a marketable product if needed.

WeCare staff is responsible for transporting and administering the on-site utilized end-products. Transport of incoming waste streams and remaining outgoing end-product will mainly be performed by third party haulers. As the process further develops, WeCare may take part in some of this hauling as well.

This contract has been on hold since June 2014 due to permitting issues. The contractor expects to start taking our material at the end of February, 2015.

6. WeCare Organics under Contract 1308-BIO

WeCare Organics, LLC (WeCare) performed transportation and disposal services for biosolids generated at the NYC Dewatering Facilities. The contractor disposed of the biosolids at landfills including: Tullytown, Pennsylvania, Grows North, Pennsylvania, and Grand Central Sanitary Landfill in Pennsylvania. This contract is for beneficial use, landfill or a combination of both. In CY2014, the biosolids handled under this contract were only sent to landfills and beneficial use until June 2014. From June 2014 to present the biosolids is landfilled.

II. SLUDGE HANDLING EQUIPMENT

A. 26th Ward Dewatering Facility

- thirteen (13) centrifuges; solid bowl type - rated @ 240 gpm
- ten (10) storage bins - working capacity 2,570 ft^3 each
- two (2) truck loading bays; pass through type
- two (2) truck loading scales (1 per bay) - 100 ton capacity each
- twenty (20) truck loading slide gates (10 per bay) - 3' L x 2' W
- one (1) scale room; automated
- four (4) thickeners; gravity type, circular - 70' diameter each –not all are necessarily used but are available.
- two (2) digesters; fixed cover type (primary) - 86' diameter, 191,500 ft^3 each
- two (2) digesters; fixed cover type (primary or secondary) - 86' diameter, 191,500 ft^3 or 186,000 ft^3 each

Regarding the above description: 26W has two primary and two primary/secondary digesters. Current operations utilize 3 as primary and 1 as a secondary digester. The volume of the swing digester is determined by its use. Therefore, if 26W is using it as a primary digester its volume is the same as the other two primaries (191,500 cubic feet each). If a tank is used as a secondary its volume is 186,000 cubic feet. However, these volumes are listed in the O&M but 26W uses more conservative values to calculate the detention time.

- four (4) heat exchangers
- six (6) mixing units; gas compressor type mixers (1 per digester) (none working)
- three (3) storage tanks; 86' diameter, 188,000 ft^3 each
  - Tank 1S is used for house sludge and PSRP boat sludge (RK)
  - Tank 2S is used for JA pump over sludge and non-PSRP boat sludges
  - Tank 3S is used for CI pump over sludge only

In addition to the primary equipment listed above, the City operates various ancillary facilities and equipment at 26th Ward that include; a docking facility which can accommodate each of the three (3) liquid sludge vessels used by the City to transport liquid sludge from the “guest” WWTPs (without dewatering facilities) to the “host” WWTPs (with dewatering facilities) and three (3) liquid sludge storage tanks. Additionally, there are two force mains that are used to pump liquid sludge from Jamaica and Coney Island to 26 Ward.

B. Bowery Bay Dewatering Facility

- four (4) centrifuges; solid bowl type - rated @ 240 gpm
- two (2) storage bins - working capacity 4,325 ft^3 each
- one (1) truck loading bays; single entry type
- one (1) truck loading scale - 100 ton capacity each
- four (4) truck loading slide gates - 3' L x 2' W
- one (1) scale room; automated
- eight (8) thickeners; gravity type, circular - 70' diameter, 48,760 ft^3 each
- four (4) digesters; fixed cover type (primary) - 81' diameter, 197,710 ft^3 each (Note: one digester, No. 5, remains out of service in 2011)
- four (4) heat exchangers; (1 per digester) - 2.6 Mbtu/hr
- six (6) storage tanks, two with fixed cover, four open tanks - 2 @ 81' diameter, 2 @ 70' diameter, 2@ 64.75' diameter (Note: one storage tank (No. 3) is being used as a primary digester and two storage tanks (Nos. 9 and 10) are being used for centrate storage in 2011)

C. Hunts Point Dewatering Facility

- thirteen (13) centrifuges; solid bowl type - rated @ 240 gpm
- ten (10) storage bins - working capacity 2,570 ft^3 each
- two (2) truck loading bays; pass through type
- two (2) truck loading scales (1 per bay) - 100 ton capacity each
- twenty (20) truck loading slide gates (10 per bay) - 3' L x 2' W
- one (1) scale room; automated
- twelve (12) thickeners; gravity type, circular - 65' diameter, 33,300 ft^3 each(6 utilized)
- four (4) digesters; fixed cover type (primary) - 118' diameter, 369,000 ft^3 each (3 utilized)
- four (4) heat exchangers
- five (5) storage tanks; varying capacities 115,000 to 373,000 ft^3 each

In addition to the primary equipment listed above, the City operates various ancillary facilities and equipment at Hunts Point that include; a docking facility which can accommodate each of the three (3) liquid sludge vessels used by the City to transport

liquid sludge from the “guest” WWTPs (without dewatering facilities) to the “host” WWTPs (with dewatering facilities) and two (2) liquid sludge storage tanks.

D. Jamaica Dewatering Facility

For this reporting period, the Jamaica Dewatering Facility was shut down.

E. Oakwood Beach Dewatering Facility

- four (4) centrifuges; solid bowl type - rated @ 300 gpm
- two (2) storage bins - working capacity 4,325 ft^3 each
- one (1) truck loading bays; pass through type
- one (1) truck loading scale - 100 ton capacity each
- four (4) truck loading slide gates - 3' L x 2' W
- one (1) scale room; automated
- two (2) thickeners; gravity type, circular - 70' diameter, 47,340 ft^3 each
- three (3) digesters; fixed cover type (primary) - 60' x 60' square,114,400 ft^3 each
- four (4) heat exchangers; external jacket type (1 per digester & 1 on standby) - 1.8 Mbtu/hr
- six (6) mixing pumps - (1 per primary digester, three on standby)
- three (3) storage tanks; - 2 @ 50' diameter, 53,800 ft^3 each; 1 @ 75' diameter, 110,390 ft^3

In addition to the primary equipment listed above, the City operates various ancillary facilities and equipment at Oakwood Beach that include a force main that are used to pump liquid sludge from Port Richmond to Oakwood Beach.

F. Red Hook Dewatering Facility

- two (2) centrifuges; solid bowl type - rated @ 120 gpm
- two (2) storage bins - working capacity 1,750 ft^3 each
- one (1) truck loading bays; pass through type
- one (1) truck loading scale - 100 ton capacity each
- four (4) truck loading slide gates - 3' L x 2' W
- one (1) scale room; automated
- four (4) thickeners; gravity type, circular - 60' diameter each

- three (3) digesters; fixed cover type (primary) - 60' diameter, 90,000 ft^3each
- three (3) digesters; fixed cover type (secondary) - 60' diameter, 90,000 ft^3 each
- thirty-six (36) sludge heaters; (6 per digester) - 320,000 btu/hr heating capacity for mesophilic operation
- twelve (12) mixing pumps; (2 per digester) - 50 hp, 4,900 gpm each
- two (2) storage tanks - 70' diameter 125,000 ft^3 each

In addition to the primary equipment listed above the City operates various ancillary facilities and equipment at Red Hook that include; a docking facility which can accommodate each of the liquid sludge vessels used by the City to transport liquid sludge from the "guest" WWTPs (without dewatering facilities) to the "host" WWTPs (with dewatering facilities) and liquid sludge storage tanks.

G. Tallman Island Dewatering Facility (Currently not in use)

For this reporting period, the Tallman Island Dewatering Facility was shut down.

H. Wards Island Dewatering Facility

- thirteen (13) centrifuges; solid bowl type - rated @ 240 gpm
- ten (10) storage bins - working capacity 2,570 ft^3 each
- two (2) truck loading bays; pass through type
- two (2) truck loading scales (1 per bay) - 100 ton capacity each
- twenty (20) truck loading slide gates (10 per bay) - 3' L x 2' W
- one (1) scale room; automated
- twelve (12) thickeners; gravity type, circular - 70' diameter, 47,300 ft^3 each
- six (6) digesters; fixed cover type (primary) - 88' diameter, 253,000 ft^3 each
- two (2) digesters; fixed cover type (secondary) - 88' diameter, 253,000 ft^3 each
- fourteen (14) heat exchangers; water process type "E"- 2.5Mbtu/hr (2 per primary digester, 1 per secondary digester)
- two (2) storage tanks - 81' diameter, 259,600 ft^3 each

In addition to the primary equipment listed above, the City operates various ancillary facilities and equipment at Wards Island that include; a docking facility which can accommodate each of the liquid sludge vessels used by the City to transport liquid sludge from the "guest" WWTPs (without dewatering facilities) to the "host" WWTPs (with dewatering facilities) and liquid sludge storage tanks.

III. LIQUID SLUDGE AND BIOSOLIDS PRODUCTION AND ALLOCATIONS

Table 3 of Appendix A contains the monthly liquid sludge production of each NYC Wastewater Treatment Plant in dry metric tons for this reporting period (January 1, 2014–December 31, 2014)

Table 4A presents the monthly liquid sludge allocation (at 14 wastewater treatment plants) in dry metric tons for the reporting period and Table 4B presents the monthly biosolids allocation (at six dewatering facilities which are located at six of the 14 wastewater treatment plants – 26th Ward, Bowery Bay, Hunts Points, Oakwood Beach, Red Hook, and Wards Island) in dry metric tons for the reporting period. Total percent solids of the biosolids were measured daily at each dewatering facility from grab samples of the material.

For the figures on Table 3 and 4A, there may be a larger standard deviation of the liquid sludge production in dry metric tons (compare to the figures in Table 4B) due to the conversion process. The production rates of liquid sludge are very large figures; when multiplied by the total solid percentage to convert to the dry metric ton, the result may have a large difference. Therefore, the figures in Table 4B are more realistic and more accurate.

IV. METALS INFORMATION

The concentration of each of the nine (9) metals listed in *Table 1 of 40 CFR Part 503.13(b)(1)* was measured in all liquid sludge generated at the 14 Wastewater Treatment plants and in the biosolids generated at eight dewatering facilities. The DEP maintains an extensive database that contains metals data from the analyses performed at the ELAP certified DEP metals laboratories and the outside contract laboratories utilized by the contractors. Tables 1 and 1A contain the analytical methods utilized by DEP respectively, for determining the concentrations of the metals in liquid sludge and biosolids. The following protocol is employed by DEP for samples of biosolids taken for metals analyses:

A grab sample of biosolids is taken from the conveyor belts that transport the material from the centrifuges to the biosolids storage hoppers, placed in a clean sampling container once per 8-hour shift and composited daily (3 grab samples per day). Although not regularly practiced, grab samples may also be taken from the sampling ports on the centrifuges, the biosolids storage hoppers and/or while the material is being discharged into a contractor's vehicle in the truck loading bays. Samples are labeled with the date, time and, where applicable, the train of centrifuges from which the sample was retrieved.

These samples are sent to DEP's Process Control Laboratories where a composite sample

is prepared and analyzed for total solids content. An aliquot of this daily composite is taken to prepare a monthly composite sample which is analyzed for metal content by DEP's Metal Laboratory. During the collection, the samples are kept at or below 39°F (4°C).

At the 26th Ward, Hunts Point, Wards Island, Bowery Bay and Oakwood Beach sludge dewatering facilities, liquid sludge from a "host" and one or more "guest" WWTPs is dewatered. At a "host" facility, the biosolids may be of various origins warranting slightly different sampling conventions as described below:

a. Liquid sludge from two or more WWTPs is mixed in the liquid sludge storage tank at the host WWTP. When this occurs, the liquid sludge mixture is dewatered and grab samples of that biosolids "mixture" are taken for the daily composite. Numerous combinations of liquid sludge from varying origins may pass through a liquid sludge storage tank in any one monitoring period. The metals analyses results of the sample for that monitoring period, contains the origin of each sludge comprising the sample and is reported with that information.

b. Biosolids from two or more WWTPs are deposited into a common biosolid storage hopper from which grab samples are taken. When this occurs, the metals analyses results of the composite sample for that monitoring period contains the origin of each sludge comprising the sample and is reported with that information.

c. Liquid sludge from each "host" and "guest" WWTP may be stored in separate liquid sludge storage tanks, dewatered by separate trains of centrifuges and stored in separate storage hoppers. When this occurs, separate grab samples of biosolids from each, the "host" and "guest" WWTP are taken, analyzed separately and reported as two distinct sludge. Whenever possible DEP has made its best effort to keep sludge of different origins separated.

Table 1
Analytical Methods for Metals Concentrations (Liquid Sludge)
NYC DEP Laboratories

Metals	**Sample Preparation and Analytical Methodologies * USEPA SW-846 & US EPA 600/4-79-020**
Arsenic	EPA Methods 6020 / 6020A
Beryllium	EPA Methods 6020 / 6020 A
Cadmium	EPA Methods 6010B / 6010C
Chromium	EPA Methods 6010B / 6010 C
Copper	EPA Methods 6010B / 6010 C
Lead	EPA Methods 6010B / 6010 C
Mercury	EPA Methods 7470A / 7471B
Molybdenum	EPA Methods 6010B / 6010 C
Nickel	EPA Methods 6010B / 6010 C
Selenium	EPA Methods 6020 / 6020 A
Zinc	EPA Methods 6010B / 6010C

Table 1A
Analytical Methods for Metals Concentrations (Biosolids)
NYC DEP Laboratories

Metals	**Sample Preparation and Analytical Methodologies * USEPA SW-846 & US EPA 600/4-79-020**
Arsenic	EPA Methods 6020 / 6020A
Cadmium	EPA Methods 6010B / 6010 C
Chromium	EPA Methods 6010B / 6010C
Copper	EPA Methods 6010B / 6010 C
Lead	EPA Methods 6010B / 6010 C
Mercury	EPA Methods 7471A / 7471 B
Molybdenum	EPA Methods 6010B / 6010 C
Nickel	EPA Methods 6010B / 6010 C
Selenium	EPA Methods 6020 / 6020 A
Zinc	EPA Methods 6010B / 6010 C

V. PATHOGEN INFORMATION & VECTOR ATTRACTION REDUCTION

The biosolids generated at the treatment plants were not certified for pathogen reduction or vector attraction reduction in 2013. All biosolids were removed by contractor for further processing and/or disposal.

VI. SLUDGE MANAGEMENT CONTRACTORS

Table 2: Sludge Management Contractor Information

Contractor	Address	Contact	End Use	Site Locations
EPIC – Landfill **Contract: 1247-BIO**	100 Stierli Court, Suite 103 Mt. Arlington, NJ07856	Mr. Neil Rogers Project Manager (973) 690-2947	Landfill	New Lexington, OH Mauk, GA Morrisville, PA Container First Services (CFS) in Petersburg, VA
Action Carting **Contract: 1280-BIO**	375 Rt. 1 & 9 South Jersey City, NJ 07306	Albert Kajtazi Project Manager (201) 954-2356	Landfill	Tullytown, PA Morrisville, PA Pen Argyl, PA Coalton, KY
Action Carting **Contract: 1280-BIO**	375 Rt. 1 & 9 South Jersey City, NJ 07306	Albert Kajtazi Project Manager (201) 954-2356	Landfill	Tullytown, PA Morrisville, PA Pen Argyl, PA Coalton, KY
EPIC **Contract: 1369-BIO**	100 Stierli Court, Suite 103 Mt. Arlington, NJ07856	Mr. Neil Rogers Project Manager (973) 690-2947	Landfill Beneficial Use	New Lexington, OH Mauk, GA Morrisville, PA Container First Services (CFS) in Petersburg, VA
We Care Organics **Contract: 1236-BIO**	9293 Bonta Bridge Rd. Jordan, NY13080	Jason Fleury Project Manager 315-952-1538	Mine Reclamation	Tremont, PA Centre County, PA Clearfield County, PA
We Care Organics **Contract: 1308-BIO**	9293 Bonta Bridge Rd. Jordan, NY13080	Owen Sheehan Project Manager (609) 499-7805	Landfill Beneficial Use	Tullytown, PA Morrisville, PA Pen Argyl, PA

VII. NOTES

All numbers have been calculated to the best of our ability. Tables may not add up due to variations in calculations such as basing data on liquid sludge production as opposed to calculated weights from biosolids hauling contractors.

WWTP REPORTS

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

26TH WARD
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

Environmental Protection

February 2015

26TH WARD

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Table 5B, Monthly Average Metals Data for Biosolids

Requisite information, specific to the 26th Ward WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
26th Ward Wastewater Treatment Plant	122-66 Flatlands Avenue Brooklyn, NY 11207	Yes	NY0026212	Superintendent Zainool Ali (718) 642-7705	Salvatore Scapelito

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type Of Permit (Federal, State)
26th Ward Wastewater Treatment Plant	122-66 Flatlands Avenue Brooklyn, NY 11207	Air State Facility Permit	261050000902003	State

I. 26TH WARD LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 all anaerobically digested, thickened sewage sludge generated at 26th Ward was dewatered at the 26th Ward sludge dewatering facility. Approximately **7,825** dry metric tons of 26th Ward sludge were generated. Table 3 and Table 4A of Appendix A contain the monthly liquid sludge production and allocations figures in dry metric tons for this reporting period.

II. 26TH WARD LIQUID SLUDGE AND BIOSOLIDS QUALITY

A. METALS ANALYSES

Table 5A and Table 5B of Appendix B summarize the average monthly metals concentrations for the liquid sludge and biosolids generated at the 26th Ward WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of 26th Ward biosolids generated each month.

During this reporting period, 26th Ward biosolids contained concentrations of metals that always met the **Ceiling Concentration Limits** for twelve (12) months as listed in *Table 1 of 40 CFR Part 503.13(b)(1)*. Further, during twelve (12) months in 2014, 26th Ward biosolids contained concentrations of metals that met the **Pollutant Concentration Limits** as listed in *Table 3 of 40 CFR Part 503.13(b)(1)*.

III. 26TH WARD BIOSOLIDS ALLOCATIONS

BIOSOLIDS FROM THE 26TH WARD WASTEWATER TREATMENT PLANT DISTRIBUTED TO SLUDGE MANAGEMENT CONTRACTORS AT THE 26TH WARD DEWATERING FACILITY. (SUMMARY IS SHOWN IN TABLE 4B IN APPENDIX B).

A. EPIC-Landfill under Contract 1247-BIO

Approximately **1,571.30** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the 26th Ward dewatering facility during this reporting period.

B. Action Carting under Contract 1280-BIO

During this reporting period **no** dry metric tons of the biosolids mix were distributed to **Action Carting** (see introduction for processing details) from the 26th Ward dewatering facility.

C. Action Carting 2 under Contract 1333-BIO

During this reporting period **no** dry metric tons of the biosolids mix were distributed to **Action Carting 2** (see introduction for processing details) from the 26th Ward dewatering facility.

D. EPIC-Landfill under Contract 1369-BIO

Approximately **563.67** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the 26th Ward dewatering facility during this reporting period

E. We Care Organics under Contract 1236-BIO

Approximately **52,60.91** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the 26th Ward dewatering facility during this reporting period.

F. We Care Organics under Contract 1308-BIO

Approximately **20,700.48** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the 26th Ward dewatering facility during this reporting period.

Table 2 in the Introduction Section contains requisite information specific to each of the six sludge management contractors.

APPENDICES

APPENDIX - A

Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors

Table 3
Monthly Liquid Sludge Production
26th Ward WWTP

Month	Liquid Sludge Production (DMT)*
January-14	708
February-14	628
March-14	981
April-14	802
May-14	977
June-14	664
July-14	576
August-14	427
September-14	521
October-14	597
November-14	630
December-14	314
TOTALS	7,825

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
26th Ward WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14										0.00
Feb-14										0.00
Mar-14										0.00
Apr-14										0.00
May-14										0.00
Jun-14										0.00
Jul-14										0.00
Aug-14										0.00
Sep-14										0.00
Oct-14										0.00
Nov-14										0.00
Dec-14										0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:

Table 4B
Monthly Biosolids Allocations to Contractors
26W Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14	114.13				1577.38		1,691.51
Feb-14	129.30				1392.76		1,522.06
Mar-14	206.81				1605.15		1,811.96
Apr-14	199.72				402.69	1108.14	1,710.55
May-14	309.45					1576.39	1,885.84
Jun-14	611.88			243.69	282.93	791.01	1,929.51
Jul-14				273.52		1516.15	1,789.67
Aug-14						1819.98	1,819.98
Sep-14						1770.01	1,770.01
Oct-14						1738.10	1,738.10
Nov-14						1607.72	1,607.72
Dec-14				46.46		1377.10	1423.56
TOTALS	**1,571.30**	**0.00**	**0.00**	**563.67**	**5,260.91**	**13,304.61**	**20,700.48**

Notes:

*Biosolids allocation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids

Table 5A
Monthly Metals Concentrations for Liquid Sludge
26th Ward WWTP

Month	METALS										
	Arsenic mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Zinc mg/L
January-14	0.0804	0.0026	0.0624	0.6780	10.50	2.58	0.0257	0.1270	0.3400	0.0847	17.0
February-14	0.0788	0.0021	0.0673	0.7260	11.30	2.81	0.0289	0.1380	0.3540	0.0870	17.5
March-14	0.0726	0.0021	0.0669	0.7160	10.50	2.85	0.0275	0.1240	0.3640	0.0689	17.4
April-14	0.1060	0.0028	0.0448	0.7510	10.20	1.06	0.0265	0.1300	0.3720	0.1240	17.3
May-14	0.0574	0.0037	0.0660	0.9060	10.50	2.77	0.0278	0.0871	0.3390	0.0869	20.3
June-14	0.0595	0.0030	0.1150	1.1900	13.60	4.38	0.0265	0.1000	0.4860	0.0824	23.2
July-14	0.0546	0.0029	0.0941	0.7550	9.74	3.27	0.0207	0.0424	0.3700	0.0678	19.2
August-14	0.0466	0.0031	0.0829	0.7870	11.20	2.95	0.0221	0.0784	0.3590	0.0690	19.4
September-14	0.0413	0.0028	0.0968	0.5790	10.00	2.52	0.0269	0.0661	0.2920	0.0631	16.5
October-14	0.0499	0.0029	0.1140	0.6493	10.82	2.59	0.0290	0.0948	0.3169	0.0745	17.6
November-14	0.0431	0.0033	0.1140	0.7480	10.60	2.61	0.0233	0.1020	0.3190	0.0656	17.1
December-14	0.0451	0.0045	0.1290	0.8290	11.10	3.26	0.0213	0.0944	0.3940	0.0636	21.8

Table 5B
Monthly Metals Concentrations for Biosolids
26th Ward Dewatering Facility

Month	METALS									
	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
January-14	4.04	2.84	32.9	518	139	1.8	5.9	19.1	4.4	869
February-14	3.61	3.00	29.4	537	136	1.5	5.4	18.0	3.3	826
March-14	3.08	2.82	30.6	530	150	1.9	5.6	18.2	3.2	861
April-14	3.69	2.31	29.8	426	112	1.5	6.9	16.9	5.2	780
May-14	3.88	2.47	38.7	540	136	1.7	4.3	22.2	4.1	1025
June-14	3.48	4.02	35.9	518	185	1.4	4.3	20.5	4.3	904
July-14	3.07	4.14	29.6	550	160	1.4	4.1	18.0	4.2	926
August-14	1.92	3.46	28.0	540	133	1.2	4.3	17.6	3.1	915
September-14	2.47	3.82	23.2	545	143	1.5	5.1	15.4	4.5	915
October-14	2.76	3.89	24.5	573	140	1.4	6.0	17.2	4.7	928
November-14	2.54	4.13	28.6	560	135	1.7	5.5	17.0	4.2	878
December-14	2.60	3.52	25.5	533	132	1.5	4.5	17.8	3.9	888

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

BOWERY BAY
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

February 2015

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Requisite information, specific to the Bowery Bay WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Bowery Bay Wastewater Treatment Plant	43-01 Berrian Boulevard, Astoria, NY 11105	Yes	NY0026158	Superintendent Eric Klee (718) 728-3975	Yue Yue Guo

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Bowery Bay Wastewater Treatment Plant	43-01 Berrian Boulevard, Astoria, NY 11105	Air State Facility Permit	263010000802003	State

I. BOWERY BAY LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 all anaerobically digested, thickened sewage sludge generated at Bowery Bay was dewatered at the Bowery Bay dewatering facility. Approximately **15,063** dry metric tons of Bowery Bay sludge were generated. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. BOWERY BAY LIQUID SLUDGE AND BIOSOLIDS QUALITY

A. METALS ANALYSES

Table 5A and Table 5B of Appendix B summarize the average monthly metals concentrations for the liquid sludge and biosolids generated at the Bowery Bay WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Bowery Bay biosolids generated each month.

During this reporting period, Bowery Bay biosolids contained concentrations of metals that always met the **Ceiling Concentration Limits** for twelve (12) months as listed in *Table 1 of 40 CFR Part 503.13(b)(1).* Further, during twelve (12) months in 2014, Bowery Bay biosolids contained concentrations of metals that met the **Pollutant Concentration Limits** as listed in *Table 3 of 40 CFR Part 503.13(b)(1).*

III. BOWERY BAY BIOSOLIDS ALLOCATIONS

BIOSOLIDS FROM THE BOWERY BAY WASTEWATER TREATMENT PLANT DISTRIBUTED TO SLUDGE MANAGEMENT CONTRACTORS AT THE BOWERY BAY DEWATERING FACILITY. (SUMMARY IS SHOWN IN TABLE 4B IN APPENDIX B).

A. EPIC-Landfill under Contract 1247-BIO

Approximately **5,140.87** dry metric tons of the biosolids were distributed to **EPIC-Landfill** (see introduction for processing details) from the Bowery Bay dewatering facility during this reporting period.

B. Action Carting under Contract 1280-BIO

Approximately **897.17** dry metric tons of the biosolids were distributed to **Action Carting** (see introduction for processing details) from the Bowery Bay dewatering facility during this reporting period.

C. Action Carting 2 under Contract 1333-BIO

Approximately **1,385.10** dry metric tons of the biosolids were distributed to **Action Carting 2** (see introduction for processing details) from the Bowery Bay dewatering facility during this reporting period.

D. EPIC-Landfill under Contract 1369-BIO

Approximately **1,603.42** dry metric tons of the biosolids were distributed to EPIC-Landfill (see introduction for processing details) from the Bowery Bay dewatering facility during this reporting period.

E. We Care Organics under Contract 1236-BIO

During this reporting period **no** dry metric tons of the biosolids were distributed to **We Care Organics** (see introduction for processing details) from the Bowery Bay dewatering facility.

F. **We Care Organics under Contract 1308-BIO**

Approximately **2,521.89** dry metric tons of the biosolids were distributed to **We Care Organics** (see introduction for processing details) from the Bowery Bay dewatering facility during this reporting period.

Table 2 in the introduction Section contains requisite information specific to each of the six sludge management contractors.

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Table 3.....Monthly Liquid Sludge Allocation
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Table 4B.....Monthly Biosolids Allocations to Contractors

Table 3
Monthly Liquid Sludge Production
Bowery Bay WWTP

Month	Liquid Sludge Production (DMT)*
January-14	1,160
February-14	967
March-14	1,324
April-14	1,409
May-14	1,336
June-14	1,318
July-14	1,316
August-14	1,542
September-14	1,310
October-14	1,166
November-14	1,250
December-14	965
TOTALS	15,063

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Bowery Bay WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14										0.00
Feb-14										0.00
Mar-14										0.00
Apr-14										0.00
May-14										0.00
Jun-14										0.00
Jul-14										0.00
Aug-14										0.00
Sep-14										0.00
Oct-14										0.00
Nov-14										0.00
Dec-14										0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

Table 4B
Monthly Biosolids Allocations to Contractors
Bowery Bay Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14	815.14						815.14
Feb-14	358.40						358.40
Mar-14	1036.76						1,036.76
Apr-14	981.15						981.15
May-14	1456.13			2.28			1,458.41
Jun-14	493.29	656.00					1,149.29
Jul-14		241.17		841.08			1,082.25
Aug-14				10.71		1000.50	1,011.22
Sep-14				10.05		1027.44	1,037.49
Oct-14			377.00			387.68	764.68
Nov-14			635.55	308.46		106.27	1,050.28
Dec-14			372.55	430.84			803.38
TOTALS	**5,140.87**	**897.17**	**1,385.10**	**1,603.42**	**0.00**	**2,521.89**	**11,548.45**

Notes:

*Biosolids allocation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Bowery Bay WWTP

Month	METALS										
	Arsenic mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Zinc mg/L
January-14	0.0894	0.0021	0.0536	0.9040	11.60	2.40	0.0220	0.1170	0.5540	0.0900	16.6
February-14	0.0826	0.0016	0.0510	0.8500	10.90	2.20	0.0168	0.1110	0.4430	0.0845	15.3
March-14	0.0802	0.0017	0.0504	1.1200	12.20	2.63	0.0245	0.1220	0.4380	0.0717	16.7
April-14	0.1150	0.0024	0.0335	1.2500	10.86	0.81	0.0190	0.1410	0.4490	0.1480	17.2
May-14	0.0536	0.0032	0.0369	1.1000	10.90	2.63	0.0242	0.0981	0.4720	0.1140	19.6
June-14	0.0498	0.0022	0.0626	0.7950	9.77	2.50	0.0162	0.0780	0.4340	0.0833	15.8
July-14	0.0552	0.0021	0.0618	0.6600	12.10	2.37	0.0173	0.0728	0.3980	0.0945	16.6
August-14	0.0415	0.0025	0.0464	0.6820	11.50	2.06	0.0172	0.1140	0.4270	0.0772	16.5
September-14	0.0413	0.0024	0.0457	0.5810	9.27	1.85	0.0142	0.0955	0.2990	0.0694	13.4
October-14	0.0494	0.0024	0.0470	0.5465	12.00	1.91	0.0147	0.1278	0.3690	0.0868	15.2
November-14	0.0466	0.0020	0.0699	0.4980	9.69	1.83	0.0150	0.0983	0.3070	0.0840	16.5
December-14	0.0583	0.0029	0.0508	0.6410	11.20	2.29	0.0264	0.0869	0.3840	0.0804	18.2

Table 5B
Monthly Metals Concentrations for Biosolids
Bowery Bay Dewatering Facility

Month	METALS									
	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
January-14	4.25	3.25	54.9	572	146	1.3	7.5	31.4	4.6	953
February-14	3.97	3.27	51.1	558	128	1.2	6.6	25.6	4.1	902
March-14	5.30	2.45	69.4	495	117	0.9	5.4	20.7	6.4	811
April-14	3.17	2.10	51.3	408	88	1.2	7.9	18.2	5.2	737
May-14	3.69	2.04	44.8	497	105	1.2	5.3	23.9	5.3	944
June-14	1.76	4.29	47.4	574	157	1.3	8.0	24.5	3.9	952
July-14	3.22	4.06	40.4	571	150	1.4	6.1	23.4	6.5	1004
August-14	1.82	3.08	48.9	585	136	1.1	7.0	23.0	2.9	1015
September-14	1.91	3.09	37.0	530	122	1.0	6.5	20.1	3.8	885
October-14	2.48	3.21	36.4	570	132	1.2	8.3	22.4	5.0	984
November-14	2.28	3.30	36.0	562	132	1.2	7.7	21.3	5.2	1134
December-14	2.33	3.09	39.6	559	143	1.5	6.6	23.6	4.2	1012

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

CONEY ISLAND
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
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February 2015

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Appendix B - Table 5A, Monthly Average Metals Data

Requisite information, specific to the Coney Island WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Coney Island Wastewater Treatment Plant	2591 Knapp Street Brooklyn, NY 11235	No	NY0026182	Superintendent Howard Robinson (718) 595-5361	James Taiwo

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Coney Island Wastewater Treatment Plant	2591 Knapp Street Brooklyn, NY 11235	Title V	261070000400017	Federal

I. CONEY ISLAND DEWATERED SLUDGE QUANTITIES

A. DEWATERING FACILITY ALLOCATIONS

The Coney Island WWTP is not furnished with a sludge dewatering facility. Liquid sludge from Coney Island is pumped approximately 7-miles through a 12-inch force main to the 26th Ward WWTP where the liquid sludge is dewatered.

For the reporting period of January 1 through December 31, 2014 approximately **9,203** dry metric tons of Coney Island liquid sludge were generated. The sludge was dewatered at the 26th Ward dewatering facility. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. CONEY ISLAND LIQUID SLUDGE QUALITY

A. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the Coney Island WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Coney Island sludge generated each month.

III. CONEY ISLAND BIOSOLIDS ALLOCATIONS --NA

APPENDICES

APPENDIX - A

Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
Coney Island WWTP

Month	Liquid Sludge Production (DMT)*
January-14	760
February-14	686
March-14	726
April-14	711
May-14	667
June-14	874
July-14	881
August-14	729
September-14	771
October-14	1,050
November-14	642
December-14	708
TOTALS	9,203

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Coney Island WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14	780.00									780
Feb-14	721.00									721
Mar-14	749.00									749
Apr-14	749.00									749
May-14	610.00									610
Jun-14	895.00									895
Jul-14	943.00									943
Aug-14	748.00									748
Sep-14	788.00									788
Oct-14	1041.00									1,041
Nov-14	622.00									622
Dec-14	725.00									725
TOTALS	**9,371.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**9,371.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Coney Island WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0737	0.0018	0.0353	0.3730	7.72	3.18	0.0337	0.0760	0.2900	0.0502	12.9
February-14	0.0632	0.0014	0.0338	0.3940	7.17	2.52	0.0424	0.0722	0.2970	0.0468	11.5
March-14	0.0579	0.0017	0.0348	0.4200	7.65	3.68	0.0691	0.0717	0.3310	0.0414	12.4
April-14	0.0823	0.0023	0.0273	0.4720	8.70	1.75	0.1120	0.0808	0.3620	0.0703	14.6
May-14	0.0588	0.0027	0.0306	0.5250	9.07	3.40	0.0493	0.0537	0.3610	0.0525	18.4
June-14	0.0580	0.0019	0.0531	0.5060	8.62	3.54	0.0310	0.0458	0.3710	0.0540	14.3
July-14	0.0545	0.0018	0.0485	0.3560	7.78	3.37	0.0200	0.0291	0.2880	0.0560	13.8
August-14	0.0451	0.0020	0.0389	0.3490	8.41	3.00	0.0275	0.0463	0.2860	0.0491	14.9
September-14	0.0495	0.0022	0.0428	0.3040	8.56	2.89	0.0206	0.0626	0.2760	0.0529	15.4
October-14	0.0562	0.0024	0.0455	0.4163	9.32	3.04	0.0246	0.0827	0.3446	0.0658	15.5
November-14	0.0446	0.0019	0.0335	0.2830	7.68	2.33	0.0321	0.0573	0.2480	0.0442	11.7
December-14	0.0442	0.0020	0.0348	0.3600	7.23	2.39	0.0415	0.0419	0.2790	0.0502	12.9

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

HUNTS POINT
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

February 2015

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Requisite information, specific to the Hunts Point WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Hunts Point Wastewater Treatment Plant	1270 Ryawa Avenue Bronx, NY 10474	Yes	NY0026191	Superintendent Steve Winrock (718) 589-1120	Antonio Ho

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Hunts Point Wastewater Treatment Plant	1270 Ryawa Avenue Bronx, NY 10474	Air State Facility Permit	260070002502005	State

I. HUNTS POINT LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 all anaerobically digested, thickened sewage sludge generated at Hunts Point was dewatered at the Hunts Point dewatering facility. Approximately **12,395** dry metric tons of Hunts Point sludge was generated. Table 3 and Table 4A of Appendix A contain the monthly liquid sludge production and allocations figures in dry metric tons for this reporting period.

II. HUNTS POINT LIQUID SLUDGE AND BIOSOLIDS QUALITY

A. METALS ANALYSES

Table 5A and Table 5B of Appendix B summarize the average monthly metals concentrations for the liquid sludge and biosolids generated at the Hunts Point WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Hunts Point biosolids generated each month.

During this reporting period, Hunts Point biosolids contained concentrations of metals that always met the **Ceiling Concentration Limits** for twelve (12) months as listed in *Table 1 of 40 CFR Part 503.13(b)(1).* Further, during twelve (12) months in 2014, Hunts Point biosolids contained concentrations of metals that met the **Pollutant Concentration Limits** as listed in *Table 3 of 40 CFR Part 503.13(b)(1).*

III. HUNTS POINT BIOSOLIDS ALLOCATIONS

BIOSOLIDS FROM THE HUNTS POINT WASTEWATER TREATMENT PLANT DISTRIBUTED TO SLUDGE MANAGEMENT CONTRACTORS AT THE HUNTS POINT DEWATERING FACILITY. (SUMMARY IS SHOWN IN TABLE 4B IN APPENDIX B).

A. EPIC - Landfill, under contract 1247-BIO

Approximately **2,544.94** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Hunts Point dewatering facility during this reporting period.

B. Action Carting, under contract 1280-BIO

Approximately **9,070.72** dry metric tons of the biosolids mix were distributed to **Action Carting** (see introduction for processing details) from the Hunts Point dewatering facility during this reporting period.

C. Action Carting 2, under Contract 1333-BIO

During this reporting period **no** dry metric tons of the biosolids mix were distributed to **Action Carting 2** (see introduction for processing details) from the Hunts Point dewatering facility.

D. EPIC-Landfill, under Contract 1369-BIO

Approximately **14,514.45** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Hunts Point dewatering facility during this reporting period.

E. We Care Organics under Contract 1236-BIO

Approximately **9.70** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the Hunts Point dewatering facility during this reporting period.

F. **We Care Organics under Contract 1308-BIO**

During this reporting period **no** biosolids mix was distributed to **We Care Organics** (see introduction for processing details) from the Hunts Point dewatering facility.

Table 2 in the introduction contains requisite information specific to each of the six sludge management contractors.

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Table 3
Monthly Liquid Sludge Production
Hunts Point WWTP

Month	Liquid Sludge Production (DMT)*
January-14	846
February-14	657
March-14	1,031
April-14	875
May-14	1,099
June-14	1,409
July-14	1,084
August-14	1,291
September-14	1,043
October-14	1,064
November-14	992
December-14	1,003
TOTALS	12,395

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Hunts Point WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14										0.00
Feb-14										0.00
Mar-14										0.00
Apr-14										0.00
May-14										0.00
Jun-14										0.00
Jul-14										0.00
Aug-14										0.00
Sep-14										0.00
Oct-14										0.00
Nov-14										0.00
Dec-14										0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

Table 4B
Monthly Biosolids Allocations to Contractors
Hunts Point Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14	596.54	1184.77					1,781.32
Feb-14	434.23	904.32			9.70	11.37	1,359.62
Mar-14	201.93	1786.91					1,988.84
Apr-14	11.84	1850.36					1,862.19
May-14		2307.20					2,307.20
Jun-14	1300.40	1037.16		589.34			2,926.89
Jul-14				2621.41			2,621.41
Aug-14				2893.54			2,893.54
Sep-14				2627.13			2,627.13
Oct-14				2377.87			2,377.87
Nov-14				1764.04			1,764.04
Dec-14				1641.14			1,641.14
TOTALS	**2,544.94**	**9,070.72**	**0.00**	**14,514.45**	**9.70**		**26,151.18**

Notes:

*Biosolids allocation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Hunts Point WWTP

Month	METALS										
	Arsenic mg/L	**Beryllium** mg/L	**Cadmium** mg/L	**Chromium** mg/L	**Copper** mg/L	**Lead** mg/L	**Mercury** mg/L	**Molybdenum** mg/L	**Nickel** mg/L	**Selenium** mg/L	**Zinc** mg/L
January-14	0.0773	0.0025	0.0664	0.9680	12.20	2.86	0.0218	0.1460	0.5930	0.0738	17.1
February-14	0.0597	0.0021	0.0653	0.8670	10.60	2.46	0.0171	0.1060	0.5350	0.0578	16.6
March-14	0.0575	0.0021	0.0629	0.8870	10.40	2.71	0.0181	0.1190	0.5240	0.0505	16.9
April-14	0.1000	0.0029	0.0364	1.0800	11.80	1.11	0.0272	0.1390	0.6520	0.1290	18.9
May-14	0.0514	0.0040	0.0409	1.0700	12.30	3.31	0.0279	0.1040	0.6910	0.0789	21.8
June-14	0.0491	0.0024	0.0838	1.0400	12.80	3.33	0.0239	0.1120	0.7910	0.0698	18.2
July-14	0.0601	0.0025	0.0904	1.3200	12.90	3.40	0.0266	0.0840	0.6810	0.0856	18.8
August-14	0.0482	0.0035	0.0806	1.2300	14.00	3.53	0.1100	0.1120	0.8260	0.0805	20.4
September-14	0.0455	0.0034	0.0617	0.8390	11.30	2.76	0.0233	0.1070	0.6380	0.0757	15.7
October-14	0.0552	0.0032	0.0780	0.9127	12.82	3.10	0.0276	0.1663	0.5307	0.0790	17.8
November-14	0.0502	0.0027	0.0595	0.8750	11.50	2.43	0.0197	0.1440	0.4900	0.0670	14.7
December-14	0.0573	0.0037	0.0648	1.2100	11.70	2.75	0.0237	0.1120	0.6390	0.0707	16.2

Table 5B
Monthly Metals Concentrations for Biosolids
Hunts Point Dewatering Facility

Month	METALS									
	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
January-14	4.03	4.01	48.1	595	150	1.3	8.9	26.5	3.5	902
February-14	4.53	4.05	52.0	564	124	1.1	8.0	24.7	3.8	831
March-14	2.62	3.55	50.2	527	133	2.0	9.0	23.7	2.3	833
April-14	4.11	2.36	43.5	458	109	1.4	10.1	22.6	3.7	766
May-14	3.83	2.57	46.2	544	143	1.7	8.7	31.5	3.4	989
June-14	2.17	5.08	50.0	617	172	1.5	8.5	28.3	2.5	922
July-14	2.56	5.46	58.9	642	171	1.7	6.8	28.5	3.0	899
August-14	3.37	5.43	50.0	666	189	2.1	17.6	28.2	3.6	1122
September-14	2.41	5.33	45.2	628	175	2.2	11.3	25.3	3.4	997
October-14	6.61	4.53	53.0	656	173	1.6	13.2	27.1	9.1	973
November-14	2.49	4.06	49.7	630	144	1.5	11.7	26.3	3.8	878
December-14	2.25	3.55	45.8	552	133	1.3	8.1	26.9	2.9	807

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

JAMAICA
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
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Corona, New York 11368
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Environmental Protection

February 2015

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Requisite information, specific to the Jamaica WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Jamaica Wastewater Treatment Plant	150-20 134th Street Jamaica, NY 11430	Yes	NY0026115	Superintendent Courtnay Anderson (718) 529-3549	Don Akamnonu

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Jamaica Wastewater Treatment Plant	150-20 134th Street Jamaica, NY 11430	Air State Facility Permit	263080002102002	State

I. JAMAICA DEWATERED SLUDGE QUANTITIES

A. DEWATERING FACILITY ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 all anaerobically digested, thickened sewage sludge generated at Jamaica was dewatered at the 26th Ward sludge dewatering facility. Approximately **8,813** dry metric tons of Jamaica sludge were generated. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. JAMAICA LIQUID SLUDGE AND BIOSOLIDS QUALITY

A. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the Jamaica WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Jamaica biosolids generated each month.

III. JAMAICA BIOSOLIDS ALLOCATION

NOTE: The Jamaica Dewatering Facility has been shut down for the reporting period of January 1 through December 31, 2014.

APPENDIX - A

Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
Jamaica WWTP

Month	Liquid Sludge Production (DMT)*
January-14	757
February-14	695
March-14	811
April-14	834
May-14	967
June-14	739
July-14	758
August-14	758
September-14	727
October-14	554
November-14	494
December-14	720
TOTALS	8,813

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Jamaica WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14	722.00									722.00
Feb-14	688.00									688.00
Mar-14	808.00									808.00
Apr-14	807.00									807.00
May-14	884.00									884.00
Jun-14	695.00									695.00
Jul-14	831.00									831.00
Aug-14	702.00									702.00
Sep-14	721.00									721.00
Oct-14	574.00									574.00
Nov-14	505.00									505.00
Dec-14	765.00									765.00
TOTALS	**8,702.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**8,702.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

Table 4B
Monthly Biosolids Allocations to Contractors
Jamaica Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14							0.00
Feb-14							0.00
Mar-14							0.00
Apr-14							0.00
May-14							0.00
Jun-14							0.00
Jul-14							0.00
Aug-14							0.00
Sep-14							0.00
Oct-14							0.00
Nov-14							0.00
Dec-14							0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**

Notes:

*Biosolids allocation is expressed in dry metric tons (DMT).

Jamaica Dewatering Facility was shut down in December 2011.

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Jamaica WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0574	0.0015	0.0294	0.2790	5.31	1.16	0.0132	0.0629	0.1760	0.0618	9.3
February-14	0.0487	0.0011	0.0279	0.2260	4.54	0.93	0.0112	0.0469	0.1430	0.0474	8.1
March-14	0.0439	0.0015	0.0333	0.2700	4.65	1.11	0.0105	0.0606	0.1870	0.0408	11.6
April-14	0.0844	0.0019	0.0185	0.3960	6.67	0.60	0.0176	0.0889	0.2180	0.1020	13.1
May-14	0.0517	0.0024	0.0216	0.3810	7.81	1.52	0.0205	0.0675	0.2120	0.0878	13.4
June-14	0.0360	0.0014	0.0425	0.2660	5.03	1.32	0.0111	0.0514	0.1950	0.0508	9.6
July-14	0.0408	0.0011	0.0253	0.2010	4.78	1.36	0.0096	<0.00309	0.1580	0.0385	8.8
August-14	0.0334	0.0010	0.0182	0.1660	4.41	1.23	0.0146	<0.00309	0.1320	0.0382	8.0
September-14	0.0314	0.0012	0.0187	0.1750	3.63	1.23	0.0104	<0.00309	0.1400	0.0334	7.0
October-14	0.0403	0.0014	0.0244	0.2427	4.98	1.48	0.0202	0.0382	0.1775	0.0488	9.3
November-14	0.0390	0.0012	0.0189	0.1850	5.26	1.09	0.0096	0.0296	0.1750	0.0412	7.4
December-14	0.0526	0.0020	0.0321	0.2770	5.90	1.68	0.0186	0.0468	0.2060	0.0691	10.9

Table 5B
Monthly Metals Concentrations for Biosolids
Jamaica Dewatering Facility

Month	METALS									
	Arsenic mg/Kg	**Cadmium** mg/Kg	**Chromium** mg/Kg	**Copper** mg/Kg	**Lead** mg/Kg	**Mercury** mg/Kg	**Molybdenum** mg/Kg	**Nickel** mg/Kg	**Selenium** mg/Kg	**Zinc** mg/Kg
January-14										
February-14										
March-14										
April-14										
May-14										
June-14										
July-14										
August-14										
September-14										
October-14										
November-14										
December-14										

Jamaica Dewatering Shut Down

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

NEWTOWN CREEK
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
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February 2015

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Appendix B - Table 5A, Monthly Average Metals Data for Liquid Sludge

Requisite information, specific to the Newtown Creek WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Newtown Creek Wastewater Treatment Plant	329 Greenpoint Avenue Brooklyn, NY 11222	No	NY0026204	Superintendent Zainool Ali (718) 389-2002	Moein Karim

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Newtown Creek Wastewater Treatment Plant	301 Green point Avenue Brooklyn, NY 11222	Title V	261010002500057	Federal

I. NEWTOWN CREEK LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 approximately **18,463** dry metric tons of Newtown Creek liquid sludge were generated. The sludge was dewatered at the Bowery Bay, Hunts Point, Wards Island, 26th Ward, Oakwood Beach (transported by force main from Port Richmond), and PVSC dewatering facilities. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. NEWTOWN CREEK LIQUID SLUDGE QUALITY

A. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the Newtown Creek WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Newtown Creek sludge generated each month.

III. NEWTOWN CREEK BIOSOLIDS ALLOCATIONS – N/A

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
Newtown Creek WWTP

Month	Liquid Sludge Production (DMT)*
January-14	1,467
February-14	1,679
March-14	1,353
April-14	1,731
May-14	1,702
June-14	1,633
July-14	1,652
August-14	1,458
September-14	1,428
October-14	1,530
November-14	1,535
December-14	1,293
TOTALS	18,463

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Newtown Creek WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Port Richmond (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14			778.00	271.00				599.00	188.00	1,836.00
Feb-14			536.00	196.00				512.00	140.00	1,384.00
Mar-14			445.00	162.00				473.00	151.00	1,231.00
Apr-14		45.00	586.00	133.00				363.00	58.00	1,185.00
May-14		255.00	654.00	188.00				484.00	157.00	1,738.00
Jun-14		23.00	1350.00	81.00		41.00		400.00	98.00	1,993.00
Jul-14			867.00					150.00	181.00	1,198.00
Aug-14			1244.00					215.00	259.00	1,718.00
Sep-14			578.00	69.00				369.00	217.00	1,233.00
Oct-14			650.00	138.00				642.00	237.00	1,667.00
Nov-14	70.00		315.00	51.00				1075.00	309.00	1,820.00
Dec-14		56.00	117.00					1072.00	431.00	1,676.00
TOTALS	**70.00**	**379.00**	**8,120.00**	**1,289.00**	**0.00**	**41.00**	**0.00**	**6,354.00**	**2,426.00**	**18,679.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Newtown Creek WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.1220	0.0026	0.1220	1.1200	13.80	3.31	0.0441	0.3000	0.6260	0.0940	20.1
February-14	0.1040	0.0019	0.1080	0.9980	12.80	2.69	0.0256	0.2590	0.5030	0.0868	17.5
March-14	0.0934	0.0021	0.1040	0.9790	12.10	2.85	0.0260	0.2470	0.5170	0.0688	18.9
April-14	0.1380	0.0030	0.0899	1.1100	12.80	0.93	0.0296	0.2870	0.5460	0.1110	23.0
May-14	0.0782	0.0040	0.1010	1.1100	12.40	3.48	0.0342	0.2480	0.5600	0.0922	25.4
June-14	0.0902	0.0026	0.1310	1.2300	14.50	4.37	0.0401	0.3230	0.5920	0.0824	23.4
July-14	0.0780	0.0024	0.1050	0.5350	8.98	2.35	0.0181	0.1080	0.3330	0.0593	14.6
August-14	0.0491	0.0023	0.0547	0.3230	6.53	1.43	0.0161	0.1230	0.2220	0.0447	10.0
September-14	0.0572	0.0028	0.0655	0.3750	7.43	1.80	0.0145	0.1190	0.2410	0.0606	11.3
October-14	0.0580	0.0027	0.0627	0.3854	7.75	1.68	0.0165	0.1377	0.2620	0.0611	11.2
November-14	0.0623	0.0031	0.0639	0.4250	8.56	1.82	0.0135	0.1400	0.2560	0.0621	11.9
December-14	0.0707	0.0036	0.0716	0.4480	9.05	2.08	0.0171	0.1230	0.2830	0.0676	13.0

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

NORTH RIVER
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
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Environmental Protection

February 2015

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Requisite information, specific to the North River WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
North River Wastewater Treatment Plant	725 West 135th Street New York, NY 10031	No	NY0026247	Superintendent William Schroder (212) 491-5050	George Sarkissian

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
North River Wastewater Treatment Plant	725 West 135th Street New York, NY 10031	Title V	262020000700015	Federal
North River Wastewater Treatment Plant	725 West 135th Street New York, NY 10031	Air State Facility Permit for 1 emergency engine generator	262020000700019	State

I. NORTH RIVER LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 approximately **12,407** dry metric tons of North River liquid sludge were generated. The sludge was dewatered at the Bowery Bay, Hunts Point, Wards Island, Oakwood Beach (transported by force main from Port Richmond) and PVSC dewatering facilities. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. NORTH RIVER LIQUID SLUDGE QUALITY

A. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the North River WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of North River sludge generated each month.

III. NORTH RIVER BIOSOLIDS ALLOCATIONS – N/A

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
North River WWTP

Month	Liquid Sludge Production (DMT)*
January-14	952
February-14	930
March-14	973
April-14	1,163
May-14	1,453
June-14	1,172
July-14	1,238
August-14	704
September-14	932
October-14	1,012
November-14	816
December-14	1,060
TOTALS	12,407

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
North River WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Port Richmond (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14		40.00	228.00	87.00			555.00	64.00	974.00
Feb-14			144.00	49.00			288.00	64.00	545.00
Mar-14			403.00	104.00			398.00	46.00	951.00
Apr-14		37.00	471.00	107.00			332.00	46.00	993.00
May-14		34.00	586.00	186.00			299.00	146.00	1,251.00
Jun-14		188.00	221.00	145.00		24.00	207.00	232.00	1,017.00
Jul-14		112.00	512.00	124.00				191.00	939.00
Aug-14		102.00	469.00	114.00				175.00	860.00
Sep-14		68.00	310.00	75.00				116.00	569.00
Oct-14		30.00	313.00	55.00			209.00	30.00	637.00
Nov-14		99.00	575.00	217.00			340.00	42.00	1,273.00
Dec-14		107.00	578.00	166.00			114.00		965.00
TOTALS	**0.00**	**817.00**	**4,810.00**	**1,429.00**	**0.00**	**24.00**	**2,742.00**	**1,152.00**	**10,974.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
North River WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0894	0.0021	0.0536	0.9040	11.60	2.40	0.0220	0.1170	0.5540	0.0900	16.6
February-14	0.0826	0.0016	0.0510	0.8500	10.90	2.20	0.0168	0.1110	0.4430	0.0845	15.3
March-14	0.0802	0.0017	0.0504	1.1200	12.20	2.63	0.0245	0.1220	0.4380	0.0717	16.7
April-14	0.1150	0.0024	0.0335	1.2500	10.86	0.81	0.0190	0.1410	0.4490	0.1480	17.2
May-14	0.0536	0.0032	0.0369	1.1000	10.90	2.63	0.0242	0.0981	0.4720	0.1140	19.6
June-14	0.0498	0.0022	0.0626	0.7950	9.77	2.50	0.0162	0.0780	0.4340	0.0833	15.8
July-14	0.0552	0.0021	0.0618	0.6600	12.10	2.37	0.0173	0.0728	0.3980	0.0945	16.6
August-14	0.0415	0.0025	0.0464	0.6820	11.50	2.06	0.0172	0.1140	0.4270	0.0772	16.5
September-14	0.0413	0.0024	0.0457	0.5810	9.27	1.85	0.0142	0.0955	0.2990	0.0694	13.4
October-14	0.0494	0.0024	0.0470	0.5465	12.00	1.91	0.0147	0.1278	0.3690	0.0868	15.2
November-14	0.0466	0.0020	0.0699	0.4980	9.69	1.83	0.0150	0.0983	0.3070	0.0840	16.5
December-14	0.0583	0.0029	0.0508	0.6410	11.20	2.29	0.0264	0.0869	0.3840	0.0804	18.2

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

OAKWOOD BEACH
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
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February 2015

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Requisite information, specific to the Oakwood Beach WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Oakwood Beach Wastewater Treatment Plant	751 Mill Road Staten Island, NY 10306	Yes	NY0026174	Superintendent Phillip Rocle (718) 351-8882	Barbara Sallusto

Additional Permits

Facility Name	Facility Location	Permit Name	Permit #	Type of Permit (Federal, State)
Oakwood Beach Wastewater Treatment Plant	751 Mill Road Staten Island, NY 10306	Registration	264040006502000	State

I. OAKWOOD BEACH LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 all anaerobically digested, thickened sewage sludge generated at Oakwood Beach was dewatered at the Oakwood Beach sludge dewatering facility. Approximately **3,794** dry metric tons of Oakwood Beach sludge were generated. Table 3 and Table 4A of Appendix A contain the monthly liquid sludge production and allocations figures in dry metric tons for this reporting period.

II. OAKWOOD BEACH LIQUID SLUDGE AND BIOSOLIDS QUALITY

A. METALS ANALYSES

Table 5A and Table 5B of Appendix B summarize the average monthly metals concentrations for the liquid sludge and biosolids generated at the Oakwood Beach WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Oakwood Beach biosolids generated each month.

During this reporting period, Oakwood Beach biosolids contained concentrations of metals that always met the **Ceiling Concentration Limits** for twelve (12) months as listed in *Table 1 of 40 CFR Part 503.13(b)(1).* Further, during twelve (12) months in 2014, Oakwood Beach biosolids contained concentrations of metals that met the **Pollutant Concentration Limits** as listed in *Table 3 of 40 CFR Part 503.13(b)(1).*

III. OAKWOOD BEACH BIOSOLIDS ALLOCATIONS

BIOSOLIDS FROM THE OAKWOOD BEACH WASTEWATER TREATMENT PLANT DISTRIBUTED TO SLUDGE MANAGEMENT CONTRACTORS AT THE OAKWOOD BEACH DEWATERING FACILITY. (SUMMARY IS SHOWN IN TABLE 4B IN APPENDIX B).

A. EPIC-Landfill under Contract 1247-BIO

Approximately **223.26** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Oakwood Beach dewatering facility during this reporting period.

B. Action Carting under Contract 1280-BIO

Approximately **9,348.72** dry metric tons of the biosolids mix were distributed to **Action Carting** (see introduction for processing details) from the Oakwood Beach dewatering facility during this reporting period.

C. Action Carting 2 under Contract 1333-BIO

During this reporting period **no** dry metric tons of the biosolids mix were distributed to **Coastal Distribution** (see introduction for processing details) from the Oakwood Beach dewatering facility.

D. EPIC-Landfill under Contract 1369-BIO

Approximately **56.37** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Oakwood Beach dewatering facility during this reporting period.

E. We Care Organics under Contract 1236-BIO

During this reporting period **no** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the Oakwood Beach dewatering facility.

F. We Care Organics under Contract 1308-BIO

Approximately **116.24** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the Oakwood Beach dewatering facility during this reporting period.

Table 2 in the introduction Section contains requisite information specific to each of the six sludge management contractors.

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors

Table 3
Monthly Liquid Sludge Production
Oakwood Beach WWTP

Month	Liquid Sludge Production (DMT)*
January-14	387
February-14	317
March-14	358
April-14	416
May-14	318
June-14	367
July-14	444
August-14	342
September-14	291
October-14	219
November-14	174
December-14	162
TOTALS	3,794

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Oakwood Beach WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14										0.00
Feb-14										0.00
Mar-14										0.00
Apr-14										0.00
May-14										0.00
Jun-14										0.00
Jul-14										0.00
Aug-14										0.00
Sep-14										0.00
Oct-14										0.00
Nov-14										0.00
Dec-14										0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

Table 4B
Monthly Biosolids Allocations to Contractors
Oakwood Beach Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14	102.63	985.15					1,087.77
Feb-14	63.29						63.29
Mar-14	34.31						34.31
Apr-14		1009.14					1,009.14
May-14		873.83					873.83
Jun-14	23.04	984.63					1,007.67
Jul-14		959.72					959.72
Aug-14		1004.84					1,004.84
Sep-14		923.95					923.95
Oct-14		947.89					947.89
Nov-14		743.95		46.09		116.24	906.29
Dec-14		915.60		10.28			925.88
TOTALS	**223.26**	**9,348.72**	**0.00**	**56.37**	**0.00**	**116.24**	**9,744.60**

Notes:

*Biosolids allocation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Oakwood Beach WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0776	0.0024	0.0426	0.4020	8.79	0.94	0.0238	0.0947	0.7300	0.0662	13.2
February-14	0.0721	0.0021	0.0452	0.4380	7.83	0.94	0.0183	0.0786	0.7740	0.0621	12.3
March-14	0.0500	0.0017	0.0376	0.3440	5.64	0.77	0.0117	0.0559	0.7790	0.0349	10.8
April-14	0.0994	0.0028	0.0236	0.4570	7.44	0.33	0.0152	0.0822	0.9290	0.0764	12.1
May-14	0.0698	0.0032	0.0635	0.8920	10.30	1.07	0.0178	0.0429	0.9560	0.0682	19.8
June-14	0.0503	0.0021	0.0613	0.4710	7.56	1.14	0.0123	0.0152	1.0200	0.0570	13.7
July-14	0.0586	0.0019	0.0591	0.4060	7.57	1.07	0.0153	0.0219	0.8210	0.0683	12.9
August-14	0.0412	0.0016	0.0343	0.3000	6.61	0.85	0.0101	0.0285	0.6750	0.0527	12.1
September-14	0.0374	0.0019	0.0364	0.2310	5.77	0.77	0.0093	0.0337	0.5320	0.0507	10.1
October-14	0.0436	0.0014	0.0374	0.2604	6.77	0.84	0.0123	0.0608	0.5580	0.0572	11.1
November-14	0.0434	0.0014	0.0336	0.2680	6.94	0.74	0.0165	0.0547	0.5670	0.0555	10.9
December-14	0.0478	0.0018	0.0347	0.3130	6.86	0.88	0.0143	0.0532	0.6590	0.0500	11.0

Table 5B
Monthly Metals Concentrations for Biosolids
Oakwood Beach Dewatering Facility

Month	METALS									
	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
January-14	5.51	3.33	44.4	471	106	1.0	8.3	29.8	3.5	772
February-14	4.44	3.40	36.0	451	76	1.6	6.2	35.2	2.6	709
March-14	3.33	3.23	40.6	475	95	1.2	7.9	39.1	2.8	796
April-14	4.63	2.17	34.2	440	73	1.3	10.2	41.5	4.5	812
May-14	5.09	2.59	46.5	568	108	1.6	7.6	51.5	3.4	1074
June-14	3.36	3.87	38.9	414	124	1.3	7.3	40.6	2.7	740
July-14	3.63	4.40	33.0	506	113	1.6	5.3	44.8	3.9	900
August-14	2.32	3.24	28.6	525	110	1.3	4.9	39.1	2.3	982
September-14	2.72	3.14	26.6	481	95	1.3	5.4	32.4	3.3	842
October-14	3.44	3.52	35.1	495	102	1.1	7.4	34.0	3.8	840
November-14	2.80	3.36	34.0	488	75	1.4	7.2	38.4	4.2	837
December-14	3.30	2.79	28.2	451	87	1.3	5.9	42.3	3.7	798

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

OWLS HEAD
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
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Environmental Protection

February 2015

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Table 4A, Monthly Liquid Sludge Allocations

Appendix B - Table 5A, Monthly Average Metals Data for Liquid Sludge

Requisite information, specific to the Owls Head WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Owls Head Wastewater Treatment Plant	6700 Shore Road Brooklyn, NY 11220	No	NY0026166	Superintendent Andrew Kittel (718) 748-3177	Lewis Duvalsaint

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Owls Head Wastewater Treatment Plant	6700 Shore Road Brooklyn, NY 11220	Title V	261020000500017	Federal

I. OWLS HEAD LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 approximately **13,002** dry metric tons of Owls Head liquid sludge were generated. The sludge was dewatered at the 26th Ward, Bowery Bay, Hunts Point, Wards Island, Oakwood Beach (transported by force main from Port Richmond) and PVSC dewatering facilities. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. OWLS HEAD LIQUID SLUDGE QUALITY

A. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the Owls Head WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Owls Head sludge generated each month.

III. OWLS HEAD BIOSOLIDS ALLOCATIONS – N/A

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
Owls Head WWTP

Month	Liquid Sludge Production (DMT)*
January-14	1,534
February-14	1,645
March-14	1,733
April-14	1,287
May-14	966
June-14	965
July-14	973
August-14	854
September-14	588
October-14	1,030
November-14	804
December-14	626
TOTALS	13,002

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Owls Head WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Port Richmond (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14			744.00		230.00			367.00	269.00	1,610.00
Feb-14		57.00	713.00		234.00			680.00	365.00	2,049.00
Mar-14			147.00		444.00			673.00	381.00	1,645.00
Apr-14		46.00	282.00		175.00			389.00	566.00	1,458.00
May-14	98.00	62.00	161.00		90.00			259.00	343.00	1,013.00
Jun-14	29.00		271.00		264.00			101.00	294.00	959.00
Jul-14	90.00	64.00	277.00		235.00			78.00	256.00	1,000.00
Aug-14	77.00	55.00	238.00		202.00			67.00	220.00	859.00
Sep-14	57.00	41.00	177.00		150.00			50.00	163.00	638.00
Oct-14			226.00		375.00			120.00	296.00	1,017.00
Nov-14	19.00	65.00	131.00		180.00			177.00	340.00	912.00
Dec-14		31.00	53.00		145.00			242.00	106.00	577.00
TOTALS	**370.00**	**421.00**	**3,420.00**	**0.00**	**2,724.00**	**0.00**	**0.00**	**3,203.00**	**3,599.00**	**13,737.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Owls Head WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0925	0.0019	0.0323	0.4240	8.35	2.03	0.0148	0.0831	0.3100	0.0913	13.7
February-14	0.0970	0.0013	0.0302	0.3460	6.80	1.55	0.0149	0.0731	0.2310	0.0918	11.2
March-14	0.0926	0.0016	0.0301	0.3690	8.01	1.88	0.0142	0.0839	0.2670	0.0947	13.0
April-14	0.0828	0.0017	0.0190	0.3330	7.34	0.66	0.0121	0.0771	0.2220	0.0946	11.0
May-14	0.0506	0.0017	0.0136	0.2490	5.14	1.33	0.0131	0.0383	0.1840	0.0493	8.6
June-14	0.0476	0.0012	0.0276	0.2580	4.76	1.65	0.0124	0.0266	0.1950	0.0435	8.6
July-14	0.0836	0.0024	0.1150	0.7680	11.30	3.79	0.0342	0.1870	0.4170	0.0592	20.5
August-14	0.0926	0.0036	0.1420	1.1000	15.00	4.30	0.0558	0.3620	0.5160	0.0934	25.1
September-14	0.0458	0.0036	0.1020	0.7890	6.43	2.08	0.0176	0.1570	0.3690	0.0479	18.0
October-14	0.0845	0.0031	0.1494	0.9484	11.83	3.25	0.0379	0.3190	0.4694	0.0828	20.7
November-14	0.0810	0.0032	0.1370	0.8890	11.70	3.01	0.0399	0.3010	0.4240	0.0797	18.9
December-14	0.0853	0.0038	0.1170	0.8720	11.80	3.14	0.0480	0.2820	0.4190	0.0784	18.7

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

PORT RICHMOND
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

February 2015

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Table 4A, Monthly Liquid Sludge Allocations

Appendix B - Table 5A, Monthly Average Metals Data for Liquid Sludge

Requisite information, specific to the Port Richmond WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Port Richmond Wastewater Treatment Plant	1801 Richmond Terrace Staten Island, NY 10310	No	NY0026107	Superintendent William Schroder (718) 447-1100	Debra Padmore

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Port Richmond Wastewater Treatment Plant	1801 Richmond Terrace Staten Island, NY 10310	Registration	264010001202000	State

I. PORT RICHMOND LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 approximately **3,620** dry metric tons of Port Richmond liquid sludge were generated. The sludge was dewatered at the Oakwood Beach (transported by force main), Hunts Point, and Wards Island. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. PORT RICHMOND LIQUID SLUDGE QUALITY

B. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the Port Richmond WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Port Richmond sludge generated each month.

III. PORT RICHMOND BIOSOLIDS ALLOCATIONS – N/A

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
Port Richmond WWTP

Month	Liquid Sludge Production (DMT)*
January-14	437
February-14	211
March-14	296
April-14	310
May-14	304
June-14	351
July-14	282
August-14	286
September-14	263
October-14	253
November-14	299
December-14	330
TOTALS	3,620

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Port Richmond WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14					437.00					437.00
Feb-14					211.00					211.00
Mar-14					296.00					296.00
Apr-14					310.00					310.00
May-14					676.00					676.00
Jun-14					651.00					651.00
Jul-14					282.00					282.00
Aug-14					286.00					286.00
Sep-14					263.00					263.00
Oct-14					253.00					253.00
Nov-14					299.00					299.00
Dec-14					330.00					330.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**4,294.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4,294.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Port Richmond WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0862	0.0012	0.0170	0.2620	3.13	0.83	0.0055	0.0851	0.3070	0.0281	6.6
February-14	0.0580	0.0007	0.0132	0.1860	1.92	0.43	0.0097	0.0513	0.1930	0.0203	4.4
March-14	0.0481	0.0011	0.0161	0.2360	1.30	0.56	0.0160	0.0355	0.2580	0.0138	5.7
April-14	0.1050	0.0021	0.0160	0.4710	3.60	0.55	0.0125	0.1000	0.5270	0.0482	9.2
May-14	0.0817	0.0031	0.0215	0.6070	5.39	1.56	0.0299	0.0826	0.7700	0.0474	12.2
June-14	0.0914	0.0022	0.0514	0.7040	7.03	1.99	0.0121	0.0957	1.0200	0.0563	14.4
July-14	0.0966	0.0022	0.0470	0.5590	6.13	1.67	0.0196	0.0905	0.7750	0.0625	11.8
August-14	0.0625	0.0021	0.0256	0.3400	4.26	1.03	0.0100	0.0658	0.5170	0.0407	9.4
September-14	0.0548	0.0016	0.0260	0.2680	4.25	0.80	0.0083	0.0655	0.3590	0.0416	7.4
October-14	0.0478	0.0016	0.0191	0.2324	3.69	0.71	0.0070	0.0761	0.3103	0.0330	6.5
November-14	0.0650	0.0017	0.0238	0.3180	4.54	0.84	0.0103	0.0869	0.3950	0.0479	7.9
December-14	0.0566	0.0019	0.0179	0.2720	3.38	0.80	0.0079	0.0964	0.4060	0.0371	6.3

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

RED HOOK
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

February 2015

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Requisite information, specific to the Red Hook WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Red Hook Wastewater Treatment Plant	63 Flushing Ave., Unit 101 Brooklyn, NY 11205	Yes	NY0027073	Superintendent Mahendra Patel (718) 935-1597	Angel Guaraca

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Red Hook Wastewater Treatment Plant	63 Flushing Ave., Unit 101 Brooklyn, NY 11205	Registration	261010002302000	State

I. RED HOOK DEWATERED SLUDGE QUANTITIES

A. DEWATERING FACILITY ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 all anaerobically digested, thickened sewage sludge generated at Red Hook was dewatered at the Red Hook sludge dewatering facility. Approximately **3,333** dry metric tons of Red Hook sludge were generated. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. RED HOOK LIQUID SLUDGE AND BIOSOLIDS QUALITY

A. METALS ANALYSES

Table 5A and Table 5B of Appendix B summarize the average monthly metals concentrations for the liquid sludge and biosolids generated at the Red Hook WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Red Hook biosolids generated each month.

During this reporting period, Red Hook biosolids contained concentrations of metals that always met the **Ceiling Concentration Limits** for twelve (12) months as listed in *Table 1 of 40 CFR Part 503.13(b)(1).* Further, during twelve (12) months in 2014, Red Hook biosolids contained concentrations of metals that met the **Pollutant Concentration Limits** as listed in *Table 3 of 40 CFR Part 503.13(b)(1)*.

III. RED HOOK BIOSOLIDS ALLOCATIONS

BIOSOLIDS FROM THE RED HOOK WASTEWATER TREATMENT PLANT DISTRIBUTED TO SLUDGE MANAGEMENT CONTRACTORS AT THE RED HOOK DEWATERING FACILITY. (SUMMARY IS SHOWN IN TABLE 4B IN APPENDIX B).

A. EPIC-Landfill under Contract 1247-BIO

During this reporting period **no** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Red Hook dewatering facility.

B. Action Carting- 1280-BIO

During this reporting period **no** dry metric tons of the biosolids mix from the Red Hook dewatering facility was distributed to **EPIC** (see introduction for processing details).

C. Action Carting 2 under Contract 1333-BIO

During this reporting period **no** dry metric tons of the biosolids mix were distributed to **Action Carting 2** (see introduction for processing details) from the Red Hook dewatering facility.

D. EPIC-Landfill under Contract 1369-BIO

Approximately **610.72** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Red Hook dewatering facility during this reporting period.

E. We Care Organics under Contract 1236-BIO

Approximately **1,224.07** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the Red Hook dewatering facility during this reporting period.

F. We Care Organics under Contract 1308-BIO

Approximately **701.04** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the Red Hook dewatering facility.

Table 2 in the Introduction Section contains requisite information specific to each of the six sludge management contractors.

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors

Table 3
Monthly Liquid Sludge Production
Red Hook WWTP

Month	Liquid Sludge Production (DMT)*
January-14	271
February-14	259
March-14	276
April-14	261
May-14	331
June-14	328
July-14	308
August-14	312
September-14	231
October-14	278
November-14	231
December-14	247
TOTALS	3,333

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT)

Table 4A
Monthly Liquid Sludge Allocations
Red Hook WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14										0.00
Feb-14										0.00
Mar-14										0.00
Apr-14										0.00
May-14										0.00
Jun-14										0.00
Jul-14										0.00
Aug-14										0.00
Sep-14										0.00
Oct-14										0.00
Nov-14										0.00
Dec-14										0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

Table 4B
Monthly Biosolids Allocations to Contractors
Red Hook Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14					167.70		167.70
Feb-14					206.34		206.34
Mar-14					225.30		225.30
Apr-14					235.15		235.15
May-14					203.90		203.90
Jun-14					185.69	88.64	274.32
Jul-14						251.61	251.61
Aug-14						282.73	282.73
Sep-14				111.07		13.55	124.62
Oct-14				189.07			189.07
Nov-14				157.03			157.03
Dec-14				153.55		64.52	218.07
TOTALS	**0.00**	**0.00**	**0.00**	**610.72**	**1,224.07**	**701.04**	**2,535.84**

Notes:

*Biosolids allocation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Red Hook WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.1480	0.0024	0.1360	0.6220	11.20	2.51	0.0224	0.1720	0.3790	0.0723	15.2
February-14	0.1260	0.0017	0.1220	0.5490	16.30	2.21	0.0253	0.1390	0.4620	0.0636	15.6
March-14	0.1090	0.0022	0.0898	0.6000	9.61	2.27	0.0229	0.1280	0.3210	0.0544	15.7
April-14	0.1360	0.0029	0.0649	0.6360	10.20	0.97	0.0171	0.1670	0.3460	0.0892	15.6
May-14	0.0809	0.0049	0.0804	0.8020	11.40	2.89	0.0216	0.1310	0.4260	0.0662	21.3
June-14	0.0770	0.0028	0.0958	0.6610	9.60	2.74	0.0155	0.1170	0.3840	0.0593	14.9
July-14	0.1110	0.0025	0.0655	0.7370	12.50	2.30	0.0257	0.0895	1.3500	0.0847	17.1
August-14	0.0765	0.0029	0.0448	0.4960	9.20	2.02	0.0218	0.0656	0.3640	0.0699	15.0
September-14	0.0734	0.0031	0.0469	0.4740	9.25	2.13	0.0268	0.0713	0.3090	0.0688	14.2
October-14	0.0768	0.0026	0.0388	0.4252	8.66	1.65	0.0175	0.1020	0.2846	0.0796	12.4
November-14	0.0680	0.0023	0.0331	0.3910	7.82	1.49	0.0194	0.0812	0.3200	0.0682	11.2
December-14	0.0772	0.0026	0.0320	0.3880	9.10	1.43	0.0258	0.0579	0.3280	0.0644	11.1

Table 5B
Monthly Metals Concentrations for Biosolids
Red Hook Dewatering Facility

Month	METALS									
	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
January-14	7.51	10.50	46.4	692	169	1.8	10.3	22.8	3.7	1064
February-14	6.86	14.20	42.3	714	156	1.6	11.9	21.2	4.3	1043
March-14	6.54	7.73	42.2	690	170	1.5	9.3	21.4	3.2	1130
April-14	7.46	6.41	40.4	549	140	1.5	10.7	19.9	4.4	986
May-14	6.89	8.07	53.2	716	148	1.5	9.3	30.8	3.7	1363
June-14	3.86	7.39	51.2	654	218	1.4	10.6	27.6	3.0	1173
July-14	5.23	7.59	47.0	685	195	1.4	10.5	25.1	4.2	1116
August-14	3.52	6.97	35.3	716	176	1.5	12.6	22.8	2.7	1167
September-14	3.90	6.62	40.3	753	177	1.6	15.8	24.5	4.3	1200
October-14	4.42	6.78	40.5	745	172	1.5	13.5	23.0	4.9	1117
November-14	3.96	5.74	38.7	713	159	1.5	12.3	21.4	4.6	1011
December-14	4.45	6.23	38.0	692	170	1.6	9.7	21.4	4.4	1039

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

ROCKAWAY
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
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96-05 Horace Harding Expressway
Corona, New York 11368
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February 2015

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Table 4A, Monthly Liquid Sludge Allocations

Appendix B - Table 5A, Monthly Average Metals Data for Liquid Sludge

Requisite information, specific to the Rockaway WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Rockaway Wastewater Treatment Plant	106-21 Beach Channel Drive Rockaway, NY 11235	No	NY0026221	Superintendent Nitin Patel (718) 474-3663	Salvatore Scapelito

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Rockaway Wastewater Treatment Plant	106-21 Beach Channel Drive Rockaway, NY 11235	Registration	263090000302000	State

I. ROCKAWAY LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 approximately **970.00** dry metric tons of Rockaway liquid sludge were generated. The sludge was dewatered at the 26th Ward, Hunts Point, Wards Island and Oakwood Beach (transported by force main from Port Richmond), dewatering facilities. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. ROCKAWAY LIQUID SLUDGE QUALITY

A. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the Rockaway WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Rockaway sludge generated each month.

III. ROCKAWAY BIOSOLIDS ALLOCATIONS – N/A

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
Rockaway WWTP

Month	Liquid Sludge Production (DMT)*
January-14	91
February-14	88
March-14	91
April-14	72
May-14	107
June-14	67
July-14	68
August-14	136
September-14	42
October-14	68
November-14	61
December-14	78
TOTALS	970

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT)

Table 4A
Monthly Liquid Sludge Allocations
Rockaway WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14					55.00			28.00		83.00
Feb-14	53.00				25.00					78.00
Mar-14	56.00		27.00		18.00					101.00
Apr-14	53.00									53.00
May-14	142.00									142.00
Jun-14	77.00							15.00		92.00
Jul-14	69.00									69.00
Aug-14	112.00									112.00
Sep-14	43.00									43.00
Oct-14	30.00	35.00						37.00		102.00
Nov-14	32.00	22.00								54.00
Dec-14	70.00							21.00		91.00
TOTALS	**737.00**	**57.00**	**27.00**	**0.00**	**98.00**	**0.00**	**0.00**	**101.00**	**0.00**	**1,020.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Rockaway WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0672	0.0017	0.0318	0.2730	7.53	1.62	0.0229	0.0694	0.2160	0.0418	10.2
February-14	0.0587	0.0015	0.0326	0.2680	7.24	1.56	0.0240	0.0688	0.2110	0.0485	8.9
March-14	0.0496	0.0013	0.0243	0.2050	6.27	1.10	0.0110	0.0522	0.1850	0.0291	6.8
April-14	0.0623	0.0015	0.0117	0.2530	5.49	0.52	0.0084	0.0578	0.1930	0.0490	6.4
May-14	0.0573	0.0019	0.0158	0.2340	8.40	1.15	0.0075	0.0318	0.2650	0.0296	7.7
June-14	0.0614	0.0017	0.0390	0.2460	6.42	1.22	0.0095	0.0262	0.1970	0.0441	7.6
July-14	0.0732	0.0020	0.0519	0.3330	7.47	1.73	0.0135	0.0174	0.2460	0.0645	11.5
August-14	0.0699	0.0025	0.0378	0.3860	7.50	1.65	0.0114	0.0251	0.2360	0.0587	12.7
September-14	0.0710	0.0021	0.0386	0.2930	7.89	1.42	0.0118	0.0389	0.1850	0.0531	10.8
October-14	0.0816	0.0024	0.0453	0.3066	9.07	1.50	0.0114	0.0627	0.2217	0.0610	12.6
November-14	0.0738	0.0018	0.0327	0.2500	8.29	1.08	0.0132	0.0485	0.1800	0.0451	8.9
December-14	0.0992	0.0034	0.0512	0.4110	10.60	2.61	0.0074	0.0662	0.2760	0.0733	14.1

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

TALLMAN ISLAND
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

City of New York, Department of Environmental Protection
Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

February 2015

TALLMAN ISLAND

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II. TALLMAN ISLAND LIQUID SLUDGE QUALITY

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Table 4A, Monthly Liquid Sludge Allocations

Appendix B - Table 5A, Monthly Average Metals Data for Liquid Sludge
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Requisite information, specific to the Tallman Island WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Tallman Island Wastewater Treatment Plant	127-01 Powell Cove Blvd College Point., NY 11356	Yes	NY006239	Superintendent Mohammed Zaman (718) 353-5124	Carmelo Giorlandino

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Tallman Island Wastewater Treatment Plant	127-01 Powell Cove Blvd College Point., NY 11356	Title V	263020001200013	Federal

I. TALLMAN ISLAND LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 approximately **8,574** dry metric tons of Tallman Island liquid sludge were generated. The sludge was dewatered at the Bowery Bay, Hunts Point, Wards Island Oakwood Beach (transported by force main from Port Richmond) and PVC, dewatering facilities. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II. TALLMAN ISLAND LIQUID SLUDGE QUALITY

A. METALS ANALYSES

Table 5A of Appendix B summarizes the average monthly metals concentrations for the liquid sludge generated at the Tallman Island WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Tallman Island sludge generated each month.

III. TALLMAN ISLAND BIOSOLIDS ALLOCATIONS – N/A

NOTE: The Tallman Island Dewatering Facility has been shut down for the reporting period of January 1 through December 31, 2014 due to treatment plant upgrade construction.

APPENDICES

APPENDIX - A

Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors (N/A)

Table 3
Monthly Liquid Sludge Production
Tallman Island WWTP

Month	Liquid Sludge Production (DMT)*
January-14	704
February-14	710
March-14	820
April-14	723
May-14	948
June-14	690
July-14	923
August-14	434
September-14	694
October-14	698
November-14	512
December-14	717
TOTALS	8,574

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT)

Table 4A
Monthly Liquid Sludge Allocations
Tallman Island WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14		34.00	383.00		94.00			162.00		673.00
Feb-14			576.00					90.00		666.00
Mar-14		63.00	511.00					207.00		781.00
Apr-14			423.00					211.00		634.00
May-14		63.00	497.00		101.00			153.00		814.00
Jun-14		29.00	351.00					84.00		464.00
Jul-14		80.00	481.00					162.00		723.00
Aug-14		42.00	250.00					84.00		376.00
Sep-14		61.00	385.00					65.00		511.00
Oct-14		69.00	431.00					68.00		568.00
Nov-14		81.00	336.00					49.00		466.00
Dec-14			490.00					157.00		647.00
TOTALS	**0.00**	**522.00**	**5,114.00**	**0.00**	**195.00**	**0.00**	**0.00**	**1,492.00**	**0.00**	**7,323.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

Table 4B
Monthly Biosolids Allocations to Contractors
Tallman Island Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14							0.00
Feb-14							0.00
Mar-14							0.00
Apr-14							0.00
May-14							0.00
Jun-14							0.00
Jul-14							0.00
Aug-14							0.00
Sep-14							0.00
Oct-14							0.00
Nov-14							0.00
Dec-14							0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**

Notes:

*Biosolids allocation is expressed in dry metric tor

Tallman Island Dewatering Facility was shut down in July 2009.

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids (N/A)

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Tallman Island WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.1100	0.0018	0.0342	0.4510	6.97	1.40	0.0158	0.0812	0.2800	0.0630	11.1
February-14	0.1120	0.0015	0.0387	0.4960	8.70	1.43	0.0168	0.0863	0.3380	0.0706	12.3
March-14	0.0959	0.0016	0.0415	0.5080	7.90	1.41	0.0156	0.0820	0.4870	0.0516	11.8
April-14	0.1200	0.0020	0.0196	0.5060	6.18	0.66	0.0179	0.0843	0.3770	0.0726	10.5
May-14	0.0845	0.0034	0.0333	0.7230	13.30	1.98	0.0238	0.0806	0.5210	0.0835	17.2
June-14	0.0817	0.0023	0.0610	0.6420	12.40	2.24	0.0201	0.0632	0.5260	0.0634	14.4
July-14	0.0473	0.0018	0.0562	0.3220	7.37	1.72	0.0172	0.0407	0.2210	0.0763	12.6
August-14	0.0423	0.0016	0.0400	0.2720	6.87	1.48	0.0142	0.0495	0.2140	0.0693	12.0
September-14	0.0437	0.0016	0.0417	0.2520	6.50	1.44	0.0168	0.0557	0.1890	0.0756	10.6
October-14	0.0499	0.0016	0.0394	0.2476	6.98	1.34	0.0149	0.0791	0.1940	0.0731	11.1
November-14	0.0491	0.0015	0.0391	0.2640	7.46	1.42	0.0227	0.0775	0.2060	0.0726	11.5
December-14	0.0551	0.0020	0.0447	0.3400	8.19	1.73	0.0278	0.0761	0.2730	0.0834	13.5

Table 5B
Monthly Metals Concentrations for Biosolids
Tallman Island Dewatering Facility

Month	METALS									
	Arsenic mg/Kg	**Cadmium** mg/Kg	**Chromium** mg/Kg	**Copper** mg/Kg	**Lead** mg/Kg	**Mercury** mg/Kg	**Molybdenum** mg/Kg	**Nickel** mg/Kg	**Selenium** mg/Kg	**Zinc** mg/Kg
January-14										
February-14										
March-14										
April-14										
May-14										
June-14										
July-14										
August-14										
September-14										
October-14										
November-14										
December-14										

Tallman Island Dewatering Shut Down

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

WARDS ISLAND
WASTEWATER TREATMENT PLANT

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
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Environmental Protection

February 2015

WARDS ISLAND

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Table 5B, Monthly Average Metals Data for Biosolids

Requisite information, specific to the Wards Island WWTP is provided below.

FACILITY NAME	LOCATION	DEWATERING FACILITY	SPDES PERMIT #	CONTACT PERSON	PROCESS ENGINEER
Wards Island Wastewater Treatment Plant	Wards Island New York, NY 10035	Yes	NY0026131	Superintendent John McCabe (212) 860-9351	Yu-Tung Chan

Additional Permits

Facility Name	Location	Permit Name	Permit #	Type of Permit (Federal, State)
Wards Island Wastewater Treatment Plant	Wards Island New York, NY 10035	Air State Facility Permit	262030000500049	State

I. WARDS ISLAND LIQUID SLUDGE QUANTITIES

A. LIQUID SLUDGE PRODUCTION AND OUTGOING LIQUID SLUDGE ALLOCATIONS

For the reporting period of January 1 through December 31, 2014 all anaerobically digested, thickened sewage sludge generated at Wards Island was dewatered at the Wards Island sludge dewatering facility. Approximately **22,573** dry metric tons of Wards Island sludge were generated. Table 3 and Table 4A of Appendix A contains the monthly liquid sludge production and allocation figures in dry metric tons for this reporting period.

II WARDS ISLAND LIQUID SLUDGE AND BIOSOLIDS QUALITY

A. METALS ANALYSES

Table 5A and Table 5B of Appendix B summarize the average monthly metals concentrations for the liquid sludge and biosolids generated at the Wards Island WWTP. The monthly metals concentrations represent an arithmetic average of the results from the analyses of all samples of Wards Island biosolids generated each month.

During this reporting period, Wards Island biosolids contained concentrations of metals that always met the **Ceiling Concentration Limits** for twelve (12) months as listed in *Table 1 of 40 CFR Part 503.13(b)(1).* Further, during twelve (12) months in 2014, Wards Island biosolids contained concentrations of metals that met the **Pollutant Concentration Limits** as listed in *Table 3 of 40 CFR Part 503.13(b)(1).*

III. WARDS ISLAND BIOSOLIDS ALLOCATIONS

BIOSOLIDS FROM THE WARDS ISLAND WASTEWATER TREATMENT PLANT DISTRIBUTED TO SLUDGE MANAGEMENT CONTRACTORS AT THE WARDS ISLAND DEWATERING FACILITY. (SUMMARY IS SHOWN IN TABLE 4B IN APPENDIX B).

A. EPIC-Landfill under Contract 1247-BIO

Approximately **569.75** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Wards Island dewatering facility during this reporting period.

B. Action Carting Contract 1280-BIO

Approximately **10,038.83** dry metric tons of the biosolids mix were distributed to **Action Carting** (see introduction for processing details) from the Wards Island dewatering facility during this reporting period.

C. Action Carting 2 under Contract 1333-BIO

Approximately **977.32** dry metric tons of the biosolids mix from the Wards Island dewatering facility was distributed to **Action Carting 2** (see introduction for processing details) from the Wards Island dewatering facility during this reporting period.

D. EPIC-Landfill under Contract 1369-BIO

Approximately **1,549.64** dry metric tons of the biosolids mix were distributed to **EPIC-Landfill** (see introduction for processing details) from the Wards Island dewatering facility during this reporting period.

E. We Care Organics under Contract 1236-BIO

Approximately **5.95** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the Wards Island dewatering facility during this reporting period.

F. We Care Organics under Contract 1308-BIO

Approximately **12,988.60** dry metric tons of the biosolids mix were distributed to **We Care Organics** (see introduction for processing details) from the Wards Island dewatering facility during this reporting period.

Table 2 in the introduction contains requisite information specific to each of the six sludge management contractors.

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Table 3.....Monthly Liquid Sludge Allocation
Table 4A.....Monthly Liquid Sludge Allocations to Contractors
Table 4B.....Monthly Biosolids Allocations to Contractors

Table 3
Monthly Liquid Sludge Production
Wards Island WWTP

Month	Liquid Sludge Production (DMT)*
January-14	1,994
February-14	1,514
March-14	2,594
April-14	1,982
May-14	1,882
June-14	1,938
July-14	1,661
August-14	1,622
September-14	1,616
October-14	1,927
November-14	1,981
December-14	1,862
TOTALS	22,573

Notes:

* Dewatered sludge production is expressed in dry metric tons (DMT).

Table 4A
Monthly Liquid Sludge Allocations
Wards Island WWTP

Month	26th Ward (DMT)*	Bowery Bay (DMT)*	Hunts Point (DMT)*	Jamaica (DMT)*	Oakwood Beach (DMT)*	Red Hook (DMT)*	North River (DMT)*	Wards Island (DMT)*	PVSC (DMT)*	**TOTALS (DMT)***
Jan-14										0.00
Feb-14										0.00
Mar-14										0.00
Apr-14										0.00
May-14										0.00
Jun-14										0.00
Jul-14										0.00
Aug-14										0.00
Sep-14										0.00
Oct-14										0.00
Nov-14										0.00
Dec-14										0.00
TOTALS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:

*Liquid sludge transportation is expressed in dry metric tons (DMT).

Table 4B
Monthly Biosolids Allocations to Contractors
Wards Island Dewatering Facility

Month	EPIC (Landfill) Contract 1247-BIO (DMT)*	Action Carting Contract 1280-BIO (DMT)*	Action Carting 2 Contract 1333-BIO (DMT)*	EPIC (Landfill) Contract 1369-BIO (DMT)*	We Care Organics Contract 1236-BIO (DMT)*	We Care Organics Contract 1308-BIO (DMT)*	**TOTALS** (DMT)*
Jan-14						2035.03	2,035.03
Feb-14					5.95	1617.38	1,623.33
Mar-14	250.53					2648.30	2,898.83
Apr-14	104.24					2152.61	2,256.85
May-14	152.91					2069.45	2,222.36
Jun-14	62.07					2028.74	2,090.81
Jul-14		1414.98		6.18		405.94	1,827.10
Aug-14		1716.51		33.27			1,749.78
Sep-14		1926.68		43.90			1,970.58
Oct-14		2142.41		63.10		31.14	2,236.65
Nov-14		1480.57		996.53			2,477.10
Dec-14		1357.68	977.32	406.67			3,718.98
TOTALS	**569.75**	**10,038.83**	**977.32**	**1,549.64**	**5.95**	**12,988.60**	**27,107.41**

Notes:

*Biosolids allocation is expressed in dry metric tons (DMT).

APPENDIX - B

Table 5A.....Monthly Average Metals Data for Liquid Sludge

Table 5B.....Monthly Average Metals Data for Biosolids

Table 5A
Monthly Metals Concentrations for Liquid Sludge
Wards Island WWTP

Month	METALS										
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
January-14	0.0586	0.0021	0.0450	0.5110	9.89	2.07	0.0191	0.1170	0.2860	0.0602	13.8
February-14	0.0578	0.0019	0.0430	0.4530	9.62	1.81	0.0216	0.1130	0.2750	0.0583	12.9
March-14	0.0585	0.0020	0.0457	0.4940	10.30	2.07	0.0309	0.1180	0.3210	0.0500	15.1
April-14	0.0792	0.0026	0.0295	0.5330	9.97	0.89	0.0207	0.1290	0.3260	0.0895	15.4
May-14	0.0489	0.0034	0.0326	0.5760	10.80	2.46	0.0243	0.0894	0.3320	0.0700	18.4
June-14	0.0475	0.0023	0.0579	0.5260	10.80	2.75	0.0252	0.0936	0.3400	0.0658	15.9
July-14	0.0575	0.0024	0.0620	0.5260	12.40	2.76	0.0246	0.0911	0.3450	0.0828	17.0
August-14	0.0444	0.0026	0.0389	0.3990	9.98	2.19	0.0292	0.1020	0.2800	0.0719	13.7
September-14	0.0437	0.0027	0.0384	0.3520	9.16	2.23	0.0220	0.0900	0.2430	0.0634	12.3
October-14	0.0468	0.0022	0.0458	0.3930	9.48	2.18	0.0388	0.1210	0.2400	0.0650	12.4
November-14	0.0443	0.0023	0.0494	0.4700	9.91	2.09	0.0305	0.1340	0.2570	0.0598	12.7
December-14	0.0548	0.0031	0.0592	0.5460	10.70	2.35	0.0228	0.1270	0.3130	0.0693	14.8

Table 5B
Monthly Metals Concentrations for Biosolids
Wards Island Dewatering Facility

Month	METALS									
	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
January-14	4.03	4.01	48.1	595	150	1.3	8.9	26.5	3.5	902
February-14	4.53	4.05	52.0	564	124	1.1	8.0	24.7	3.8	831
March-14	2.62	3.55	50.2	527	133	2.0	9.0	23.7	2.3	833
April-14	4.11	2.36	43.5	458	109	1.4	10.1	22.6	3.7	766
May-14	3.83	2.57	46.2	544	143	1.7	8.7	31.5	3.4	989
June-14	2.17	5.08	50.0	617	172	1.5	8.5	28.3	2.5	922
July-14	2.56	5.46	58.9	642	171	1.7	6.8	28.5	3.0	899
August-14	3.37	5.43	50.0	666	189	2.1	17.6	28.2	3.6	1122
September-14	2.41	5.33	45.2	628	175	2.2	11.3	25.3	3.4	997
October-14	6.61	4.53	53.0	656	173	1.6	13.2	27.1	9.1	973
November-14	2.49	4.06	49.7	630	144	1.5	11.7	26.3	3.8	878
December-14	2.25	3.55	45.8	552	133	1.3	8.1	26.9	2.9	807

City of New York
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Wastewater Treatment

CONTRACTORS' ISSUES

US EPA 40 CFR Part 503
Use or Disposal of Sewage Sludge
2014 Annual Report

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by

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Bureau of Wastewater Treatment
SPDES Compliance Section
96-05 Horace Harding Expressway
Corona, New York 11368
(718) 595-5056

February 2015

CONTRACTORS' ISSUES

There were not issues with any of the contracts for the reporting period of January 1 through December 31, 2014.